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=> d l1
L1 HAS NO ANSWERS
L1              STR
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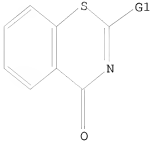

G1 Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 09:10:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      498 TO ITERATE

100.0% PROCESSED      498 ITERATIONS                              14 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         8622 TO    11298
PROJECTED ANSWERS:              56 TO      504

L2           14 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 09:11:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    10083 TO ITERATE

100.0% PROCESSED    10083 ITERATIONS                            219 ANSWERS
SEARCH TIME: 00.00.01

L3          219 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                              SINCE FILE      TOTAL
                                                    ENTRY    SESSION
FULL ESTIMATED COST                                178.36     178.57

FILE 'CAPLUS' ENTERED AT 09:11:08 ON 13 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 13 Feb 2008 VOL 148 ISS 7
FILE LAST UPDATED: 12 Feb 2008 (20080212/ED)

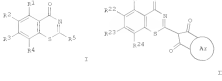
=> s l3
L4 45 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:33207 CAPLUS
DOCUMENT NUMBER: 146:131801
TITLE: Optical recording medium and benzo-[e]-[1,3]-thiadiazin-4-one derivative
INVENTOR(S): Ishida, Tsuneo; Migaido, Masataka; Shiozaki, Hiroyoshi; Ogino, Akira
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 51pp.
CODEN: JKXAAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007001094	A	20070111	JP 2005-182695	20050622
PRIORITY APPLN. INFO.:			JP 2005-182695	20050622

OTHER SOURCE(S): MARPAT 146:131801
GI

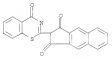


I

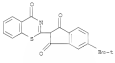
II

AB The material contains 2) benzo-[e]-[1,3]-thiadiazin-4-one derivative in the recording layer. The compound I and II (one of the tautomeric structure) (R1-5, R21-24 = H, halo, nitro, cyano, OH, carbonyl alkyl, aralkyl, aryl, metalloxenyl, etc.; Ar = aromatic ring) are claimed.
The material is recorded and read by 300-900 nm laser beam.
IT 67473-64-9 918647-38-8 918647-40-2
918647-42-4 918647-45-7 918647-47-9
918647-49-1 918647-51-5 918647-53-7
RL: TEM (Technical or engineered material use); USES (Uses)
(optical recording material containing benzothiazinone compound)
RN 67473-64-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)

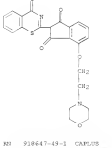
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 918647-45-7 CAPLUS
CN 1H-Indene-1,3(2H)-dione, 5-[1,1-dimethylethyl)-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

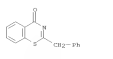


RN 918647-47-9 CAPLUS
CN 1H-Indene-1,3(2H)-dione, 4-[2-(4-morpholinyl)ethoxy)-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

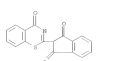


RN 918647-49-1 CAPLUS
CN 1H-Indene-5-carboxamide, N,N-diethyl-2,3-dihydro-1,3-dioxo-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

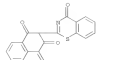
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 918647-38-8 CAPLUS
CN 1H-Indene-1,3(2H)-dione, 2-(4-oxo-4H-1,7-benzothiazin-2-yl)- (CA INDEX NAME)

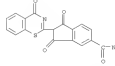


RN 918647-40-2 CAPLUS
CN 1H-Phenalene-1,3(2H)-dione, 2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

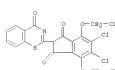


RN 918647-42-4 CAPLUS
CN 1H-Benz[f]indene-1,3(2H)-dione, 2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

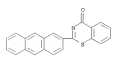
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 918647-51-5 CAPLUS
CN 1H-Indene-1,3(2H)-dione, 5,6-dichloro-4,7-bis[2-ethoxyethoxy)-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

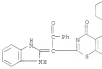


RN 918647-53-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[2-anthracenyl)- (CA INDEX NAME)

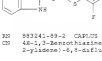


L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1010059 CAPLUS
DOCUMENT NUMBER: 144:390853
TITLE: Polyfluorobenzoyl chlorides and isothiocyanates in reactions with CH-reactive benzimidazoles
AUTHOR(S): Nosova, E. V.; Lipunova, G. N.; Leeve, A. A.; Charushin, V. N.
CORPORATE SOURCE: Ural State Technical University, Yekaterinburg, 620002, Russia
SOURCE: Russian Chemical Bulletin (2005), 54(3), 733-737
CODEN: RCBUEY; ISSN: 1066-5285
PUBLISHER: Springer Science+Business Media, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:390853
AB Reactions of 2-benzoylmethylbenzimidazole with tetra- and pentafluorobenzoyl chlorides afford fluorine-containing 4-benzoyl-7H-benzimidazo[1,2-a]quinolones. 2-(Cyanomethyl)- or 2-[benzoylmethyl]benzimidazole reacts with tetra(penta)fluorobenzoyl isothiocyanates to give fluorine-containing 1,7-benzothiazinones, which differently behave in reactions with cycloalkylimines.
IT 883241-90-2P 883241-91-3P 883241-91-4P
883241-92-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of fluorinated benzimidazoquinolones and benzothiazinones by cyclocondensation of CH-reactive benzimidazoles with fluorobenzoyl chlorides or isothiocyanates)
RN 883241-79-6 CAPLUS
CN 4H-1,7-Benzothiazine-2-acetonitrile, 6-(1,3-dihydro-2H-benzimidazol-2-ylidene)-5,7,8-trifluoro-4-oxo- (CA INDEX NAME)

RN 883241-80-3 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 6-(1,3-dihydro-2H-benzimidazol-2-ylidene)-5,6,7,8-tetrafluoro-4-oxo- (CA INDEX NAME)



L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

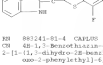


RN 883241-87-0 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 6-(1,3-dihydro-2H-benzimidazol-2-ylidene)-5,8-difluoro-7-(4-morpholinyl)-4-oxo- (CA INDEX NAME)

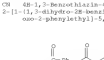
RN 883241-89-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 6-(1,3-dihydro-2H-benzimidazol-2-ylidene)-5,8-difluoro-5,7-di-4-morpholinyl-4-oxo- (CA INDEX NAME)

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 883241-81-4 CAPLUS
CN 4H-1,7-Benzothiazin-4-one, 2-[1-(1,3-dihydro-2H-benzimidazol-2-ylidene)-2-oxo-2-phenylethyl]-6,7,8-trifluoro- (CA INDEX NAME)



RN 883241-82-5 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[1-(1,3-dihydro-2H-benzimidazol-2-ylidene)-2-oxo-2-phenylethyl]-5,6,7,8-tetrafluoro- (CA INDEX NAME)

IT 883241-85-8P 883241-87-0P 883241-89-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of fluorinated benzimidazoquinolones and benzothiazinones by cyclocondensation of CH-reactive benzimidazoles with fluorobenzoyl chlorides or isothiocyanates)
RN 883241-85-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[1-(1,3-dihydro-2H-benzimidazol-2-ylidene)-2-oxo-2-phenylethyl]-6,8-difluoro-5,7-di-4-morpholinyl- (CA INDEX NAME)

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:458612 CAPLUS
DOCUMENT NUMBER: 141:123638
TITLE: Preparation of 1,3-benzothiazinones as macrophage migration inhibitory factor binders and apoptosis inhibitors, and treatment of diseases with them or their prodrugs
INVENTOR(S): Kajino, Masahiro; Nakayama, Yutaka; Kimura, Atsuhide
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004196792	A	20040715	JP 2003-406172	20031204
WO 2004048881	A1	20040702	WO 2003-JP15535	20031204

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003289176	A1	20040728	AU 2003-289176	20031204
EP 1568697	A1	20050831	EP 2003-777247	20031204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006052375	A1	20060309	US 2005-537528	20050601
PRIORITY APPLN. INFO.:			JP 2002-355546	A 20021205
			WO 2003-JP15535	W 20031204

OTHER SOURCE(S): MARPAT 141:123638
GI

AB Title compds. I [R1 = halo, OH, NO2, (halo)alkyl, aryl, (un)substituted amino; R2 = (un)substituted branched alkyl, (un)substituted cycloalkyl, (un)substituted condensed homocyclic ring residue, substituted Ph; n = 0-4] or their salts, which have low toxicity (no data), are prepared The

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
compds. or their prodrugs are useful for prophylactic and therapeutic
treatment of circulation disorders [e.g. heart failure], bone and joint
diseases, infectious diseases, inflammation, and kidney diseases. Thus,
2-[(cyclopropylcarbonyl)thio]benzoic acid was treated with ClCO2Et, NaN3,
and Bu3P, and cyclized to give 1 (R1a = H, R2 = cyclopropyl), which
inhibited rat mPGES-1 enzyme synthesis with IC50 value of 0.072 μM.
IT 141961-48-1P 722507-22-4P 722507-32-4P
722507-34-6P 722507-42-8P 722507-44-0P
722507-46-2P 722507-48-4P 722507-50-8P
722507-52-0P 722507-54-2P 722507-56-4P
722507-58-6P 722507-65-0P 722507-66-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of benzothiazinones as macrophage migration inhibitory
factor
binders and apoptosis inhibitors for treatment of diseases)

RN 547696-69-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(2-methoxyphenyl)- (CA INDEX NAME)

RN 722507-22-4 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-cyclopropyl- (CA INDEX NAME)

RN 722507-32-6 CAPLUS
CN Acetic acid, [3-(4-oxo-4H-1,3-benzothiazin-2-yl)phenoxy]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 722507-42-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(3-bromophenyl)- (CA INDEX NAME)

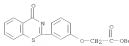
RN 722507-44-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(4-hydroxyphenyl)- (CA INDEX NAME)

RN 722507-46-2 CAPLUS
CN Acetamide, N-[3-(4-oxo-4H-1,3-benzothiazin-2-yl)phenyl]- (CA INDEX NAME)

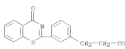
RN 722507-48-4 CAPLUS
CN Benzonitrile, 4-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

RN 722507-50-8 CAPLUS

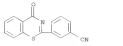
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



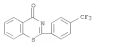
RN 722507-54-0 CAPLUS
CN Benzenepropanoic acid, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)



RN 722507-76-0 CAPLUS
CN Benzonitrile, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

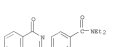


RN 722507-38-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

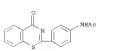


RN 722507-40-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(4-acetylphenyl)- (CA INDEX NAME)

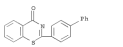
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN Benzamide, N,N-diethyl-4-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)



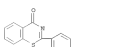
RN 722507-52-0 CAPLUS
CN Acetamide, N-[4-[4-oxo-4H-1,3-benzothiazin-2-yl]phenyl]- (CA INDEX NAME)



RN 722507-54-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[1,1'-biphenyl]-4-yl- (CA INDEX NAME)

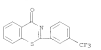


RN 722507-56-4 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

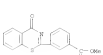


RN 722507-58-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 722507-60-0 CAPLUS
CN Benzoic acid, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)



RN 722507-62-2 CAPLUS
CN Phenylalanine, N-benzoyl-3-(4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)

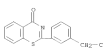
IT 722507-66-6P 722507-84-8P 722507-88-2P
PL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzothiazinones as macrophage migration inhibitory factor
Bunders and apoptosis inhibitors for treatment of diseases)

RN 722507-66-6 CAPLUS
CN Benzenepropanoic acid, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

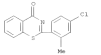
L4 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:803367 CAPLUS
DOCUMENT NUMBER: 138:221554
TITLE: Synthesis and structural characterization of 4H-1,3-benzothiazine derivatives
AUTHOR(S): Fodor, Lajos; Semath, Gabor; Sinkkonen, Jari; Pihlaja, Kalevi
CORPORATE SOURCE: Research Group for Heterocyclic Chemistry of the Hungarian Academy of Sciences, Institute of Pharmaceutical Chemistry, University of Szeged, Szeged, H-6701, Hung.
SOURCE: Journal of Heterocyclic Chemistry (2002), 39(5), 917-931
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:221554
AB The ring-closure reactions of N-arylthiomethylaroylamide derivs. [e.g., 4-methoxy-N-[[3-methylphenyl]thio]methyl]benzamide, 6-chloro-N-[[3,4-dichlorophenyl]thio]methyl]benzamide, etc.] in the presence of phosphorus oxychloride gave 2-aryl-4H-1,3-benzothiazines. 2-(5-Chlorophenyl)-6-methyl-4H-1,3-benzothiazine was reduced with Zn to obtain the corresponding 2,3-dihydro derivative. Potassium permanganate oxidation of 2-(4-chlorophenyl)-2,3-diethoxy-4H- and 2-(2-fluorophenyl)-6,7-diethoxy-4H-1,3-benzothiazines gave the corresponding 4-ones. The reactions of 2-(4-chlorophenyl)-6-methyl-4H-1,3-benzothiazine with substituted acetyl chlorides led to linearly condensed β-lactams. The structures of the compds. studied were confirmed by 1H and 13C NMR and by their characteristic mass spectrometric fragmentations. Azeto[2,1-b][1,3]benzothiazin-1-one derivs. were also prepared
IT 501087-96-3P 501087-97-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and structural characterization of (phenyl)benzothiazine derivs.)
RN 501087-96-3 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(4-chlorophenyl)-6,7-diethoxy- (CA INDEX NAME)

RN 501087-97-4 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-(2-fluorophenyl)- (CA INDEX NAME)

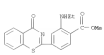
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



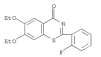
RN 722507-84-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(4-chloro-2-methylphenyl)- (CA INDEX NAME)



RN 722507-88-2 CAPLUS
CN Benzoic acid, 2-[ethylamino)-6-[4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)



L4 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:429884 CAPLUS
DOCUMENT NUMBER: 137:28319
TITLE: Heterocyclic poly(ADP-ribose) polymerase (PARP) inhibitors
INVENTOR(S): Meltzer, Teri; Perkins, Edward L.; Yeh, Elaine; Sun, Susan
PATENT ASSIGNEE(S): Iconix Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044157	A2	20020606	WO 2001-US46811	20011203
WO 2002044157	A3	20021227		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002020241	A5	20020611	AU 2002-20241	20011203

PRIORITY APPLN. INFO.: US 2000-250819P P 20001201
WO 2001-US46811 W 20011203

OTHER SOURCE(S): MARPAT 137:28319
GI

L4 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:403758 CAPLUS
DOCUMENT NUMBER: 135:220880
TITLE: Novel inhibitors of poly(ADP-ribose) polymerase/PARP1 and PARP2 identified using a cell-based screen in yeast
AUTHOR(S): Perkins, Ed; Sun, Dongxu; Nguyen, Allen; Tulac, Suzana; Francesco, Michelle; Tavana, Roma; Nguyen, Hieu; Topendzieh, Stuart; Ballmaier, Peter; Couto, Joe; Yeh, Elaine; Thode, Silke; Jarnagin, Kurt; Zain, Ajay; Morgans, David; Melese, Teri
CORPORATE SOURCE: Iconix Pharmaceuticals, Mountain View, CA, 94043, USA
SOURCE: Cancer Research (2001), 61(10), 4175-4183
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Multicellular organisms must have means of preserving their genomic integrity or face catastrophic consequences such as uncontrolled cell proliferation or massive cell death. One response is a modification of nuclear proteins by the addition and removal of polymers of ADP-ribose that modulate the properties of DNA-binding proteins involved in DNA repair and metabolism. These ADP-ribose units are added by poly(ADP-ribose) polymerases (PARP) and removed by poly(ADP-ribose) glycohydrolase. Although budding yeast Saccharomyces cerevisiae does not possess proteins with significant sequence similarity to the human PARP family of proteins, we identified novel small mol. inhibitors against two family members, PARP1 and PARP2, using a cell-based assay in yeast. The assay was based on the reversal of growth inhibition caused by the heterologous expression of either PARP1 or PARP2. Validation of the assay was achieved by showing that the growth inhibition was relieved by a mutation in a single residue in the catalytic site of PARP1 or PARP2 or exposure of yeast to a known PARP1 inhibitor, 6(5H)-phenanthridinone. In exp. expts., when a putative protein regulator of PARP activity, human poly(ADP-ribose) glycohydrolase, was coexpressed with PARP1 or PARP2, yeast growth was restored. Finally, the inhibitors identified by screening the yeast assay are active as a mammalian PARP biochem. assay and inhibit PARP1 and PARP2 activity in yeast cell exts. Thus, our data reflect the strength of using yeast to identify small mol. inhibitors of therapeutically relevant gene families, including those that are not found in yeast, such as PARP. The resultant inhibitors have two critical uses (a) as leads for drug development and (b) as tools to dissect cellular function.
IT 67433-05-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(novel inhibitors of poly(ADP-ribose) polymerase/PARP1 and PARP2 identified using a cell-based screen in yeast)
RN 67433-05-0 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)

L4 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

AB Compds. I, II, and III [A1 = C(R4), N; A2 = C(R5), S; R1 = R, lower alkyl, halo, carbonyl; R2 = H, lower alkyl, acyl, or forms double bond with adjacent ring atom; R3 = H, lower alkyl, halo, aryl, etc.; R4 = H, lower alkyl, or forms double bond with adjacent ring atom; R5 = H, lower alkyl, OH, halo, lower alkoxy, etc.; R6, R7 = H, lower alkyl, OH, lower alkoxy, halo, nitro, etc.; R10 = H, lower alkyl, lower alkenyl, aryl, heterocyclyl, etc.; R11-R13 = halo, nitro, OH, NH2, lower alkyl, and pharmaceutically acceptable salts thereof, are effective mediators of PARP enzymes.
IT 67433-05-0, ICX 56259537
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(heterocyclic poly(ADP-ribose) polymerase (PARP) inhibitors)
RN 67433-05-0 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)

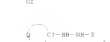
L4 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:822981 CAPLUS
DOCUMENT NUMBER: 133:367807
TITLE: Silver halide color photographic material containing color developer and coupler and image formation
INVENTOR(S): Uchida, Osamu; Ishiwata, Yasuhiro; Katsumata, Taiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 46 pp.
CODEN: JKXAAP
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

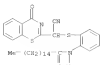
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000321733	A	20001124	JP 1999-127700	19990507
PRIORITY APPLN. INFO.:			JP 1999-127700	19990507

OTHER SOURCE(S): MARPAT 133:367807
GI



AB The material comprises a support having thereon ≥1 hydrophilic colloid layer containing ≥1 color developer I (W = C, E = carbamoyl, acyl, alkoxycarbonyl, aryloxycarbonyl; Q = atoms required to form an unsatd. ring with CW) and ≥1 coupler II (B = C; BNG = CH, carbamoyl, alkoxycarbonyl; LG = releasing group by coupling-reaction with developer oxidation product; M = atoms required to form 6-membered aromatic heterocyclic ring with CB). Images are formed by (1) heat-developing the material; (2) developing it in the presence of alkali generated by slightly soluble metal salt and its complexing agent; or (3) developing it with an alkaline developer. The material shows improved color development, providing images with improved light, heat, and humidity stability.
IT 307496-58-0
RL: DEV (Device component use); USES (Uses)
(photog. film containing developer and coupler)

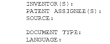
L4 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 307496-58-0 CAPLUS
CN Hexadecanamide, N-[2-[[cyano(4-oxo-4H-1,7-benzothiazin-2-yl)methyl]thio]phenyl]-N-methyl- (CA INDEX NAME)



L4 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:822980 CAPLUS
DOCUMENT NUMBER: 133:367806
TITLE: Silver halide color photographic material containing specific coupler and image formation using same
INVENTOR(S): Uchida, Osamu; Ishiwata, Yasuhiro; Katsumata, Taiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 39 pp.
CODEN: JKXAAP
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

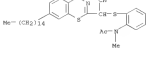
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000321732	A	20001124	JP 1999-127698	19990507
PRIORITY APPLN. INFO.:			JP 1999-127698	19990507

OTHER SOURCE(S): MARPAT 133:367806
GI



AB The title photog. material contains ≥1 coupler of the formula I (CB = C atom; ENG = CN, carbamoyl, alkoxycarbonyl; M = atoms required to form an aromatic heterocycle along with CB; LG = arylthio) in ≥1 of the hydrophilic colloid layers formed on a support. The material is heat-developed or developed under such a condition that alkali is generated by a slightly soluble metal salt and its complex-forming agent or by developing an alkaline processing solution to form images. The couplers show high coloring properties and stability and provides high quality color images with high sharpness and storage stability.
IT 307932-98-5
RL: DEV (Device component use); USES (Uses)
(photog. coupler having arylthio group)
RN 307932-98-5 CAPLUS
CN Acetamide, N-[2-[[cyano(4-oxo-7-pentadecyl-4H-1,3-benzothiazin-2-yl)methyl]thio]phenyl]-N-methyl- (CA INDEX NAME)

L4 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:270189 CAPLUS
DOCUMENT NUMBER: 133:59023
TITLE: Activated nitriles in heterocyclic synthesis: facile synthesis of heteroarylthymine analogs and their nucleosides
AUTHOR(S): Allam, Yehia A.; Chabaka, Laila M.; Nawwar, Galal A. M.
CORPORATE SOURCE: Pesticide Laboratory, National Research Centre, Cairo, Egypt
SOURCE: Heteroatom Chemistry (2000), 11(7), 209-212
CODEN: HETCE8; ISSN: 1042-7163
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:59023
AB 5-Heteroarylthymine analogs were synthesized via bimolecular attack with hydrazine thiols on the cyano group of cyanoacrylates to form the heteroarylurea deriva. followed by their cyclization with formamide. Also, their nucleosides with 2,3,4,6-tetra-O-acetyl-.alpha.-D-glucopyranose were prepared
IT 277754-11-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of heteroarylthymine analogs and their nucleosides using activated nitriles)
RN 277754-11-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetamide, N-(aminocarbonyl)-4-oxo- (CA INDEX NAME)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:522687 CAPLUS
DOCUMENT NUMBER: 119:122687
TITLE: Threshold composition of iron-cobalt alloys during their corrosion in inhibited sulfuric acid media
AUTHOR(S): Grigor'ev, V. P.; Gershanova, I. M.; Kravchenko, V. N.
CORPORATE SOURCE: Rostov. Gos. Univ., Rostov., Russia
SOURCE: Zashchita Metallov (1992), 28(5), 837-8
CODEN: ZAMEAP; ISSN: 0044-1856
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Weight loss and electrochem. studies were conducted on Fe-(8-69.3) atomic% Co alloys in 0.5 M H2SO4 solns. containing 0.05-0.5 mM 2-phenyl-4-oxo-1,3-benzothiazine perchlorate (I). Alloys containing less than 18-23 atomic% Co behave more like Fe and those above the threshold composition have corrosion parameters approaching Co. The I adsorption on the alloys is described by the Freundlich isotherm.
IT 97189-42-9
RL: PROC (Process)
(corrosion inhibition by, of iron-cobalt alloys in sulfuric acid solns.)
RN 97189-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
CMF Cl H O4

CM 2

CRN 7474-08-0
CMF C14 H9 N O S

L4 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:416999 CAPLUS
DOCUMENT NUMBER: 119:16999
TITLE: Threshold composition of iron-cobalt alloy as a function of solution temperature
AUTHOR(S): Grigor'ev, V. P.; Gershanova, I. M.; Kravchenko, V. N.
CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, Russia
SOURCE: Elektrokhimiya (1993), 29(2), 273-5
CODEN: ELKHAX; ISSN: 0424-8570
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The influence of the temperature on the threshold composition of an Fe-Co alloy in inhibited H2SO4 solns. was studied. Potentiostatic and photocolorimetric methods were used to study the anodic dissoln. of cast Fe-Co alloys (Co 1.7-69.3 mol.%) in 0.5M H2SO4 containing 1 + 10-4N 2-phenyl-4-oxo-1,3-benzothiazinium perchlorate at temps. of 25-60° in the active range of potentials E 1-0.25 to 0.05 V). The reference electrode was saturated Ag chloride.
IT 97189-42-9
RL: PRP (Properties)
(anodic dissoln. of cobalt-iron alloys in sulfuric acid containing)
RN 97189-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
CMF Cl H O4

CM 2

CRN 7474-08-0
CMF C14 H9 N O S

L4 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:602467 CAPLUS
DOCUMENT NUMBER: 117:202467
TITLE: Threshold concentration of binary iron-cobalt alloys during their anodic dissolution in the presence of surfactants
AUTHOR(S): Grigor'ev, V. P.; Kravchenko, V. M.; Gershanova, I. M.; Akseneva, N. G.
CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, Russia
SOURCE: Zashchita Metallov (1992), 28(3), 390-4
CODEN: ZAMEAY; ISSN: 0044-1856
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB In the presence of surfactants at a predetd. alloy composition, it is possible to transfer the control of its dissoln from 1 component to the other, using Fe-Co alloys as an example. Thus, the anodic dissoln. characteristics were studied of cast Fe-Co alloy in pure and inhibited solns. of H2SO4. The Fe-Co alloys contained 1.8, 7.9, 18.8, 24.7, 32.7, 42.2, and 70.8 weight% Co as solid solns. For comparison, samples of Armco Fe and Co of grade "K-0" were tested in 0.5M H2SO4 at E (in the active region) of -0.2 to +0.05 V/sq. a normal H electrode. The surfactant additive which was used was 2-phenyl-4-oxo-1,3-benzothiazinium perchlorate. The introduction into the solution of the surfactant, changing (in different ways) the angular coeffs. of the anodic curves log j vs. E for Co and Fe, lead to the appearance of a threshold composition of the Fe-Co alloy, at which control of the dissoln. kinetics of the alloy passes from 1 component to the other.
IT 97189-42-9, 2-Phenyl-4-oxo-1,3-benzothiazinium perchlorate
RL: PEP (Properties)
(anodic dissoln. of iron-cobalt alloys in presence of, threshold concentration of binary alloys in relation to)
RN 97189-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
CMF Cl H O4

CM 2

L4 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CRN 7474-08-0
CMF C14 H9 N O S

L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:214422 CAPLUS
DOCUMENT NUMBER: 116:214422
TITLE: Recyclization of 4-oxo-1,3-benzothiazinium salts. Synthesis of o-(mercaptophenyl)-1,2,4-triazoles and their metal chelates
AUTHOR(S): Ryabukhin, Yu. I.; Korzhavina, O. B.; Garnovskii, A. D.; Knyazev, A. F.; Terent'ev, P. B.
CORPORATE SOURCE: Vasilhko-Issed. Inst. Fiz. Org. Khim., Rostov-on-Don, 344090, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1991), (9), 1220-6
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 116:214422
GI

AB 5-(o-Mercaptophenyl)-1,2,4-triazoles I (R = Ph, Rl = H, Ph, PhCH2; R = PhCH2, p-O2NC6H4, Rl = Ph) were prepared (50-80% yields) by recyclization of 4-oxo-1,3-benzothiadiazinium perchlorates II with RlNHNH2 in refluxing AcOH. Treating I in a min. volume of MeOH with M(OAc)2 (M = Co, Ni, Zn) gave 53-84% complexes III (Rl = Ph, M = Co, Ni, Zn, Rl = PhCH2, M = Co, Rl = Ph).
IT 97189-42-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(recyclization of, by hydrazines)
RN 97189-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
CMF Cl H O4

L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

CRN 7474-08-0
CMF C14 H9 N O S

IT 97189-44-1 140455-64-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(recyclization of, by phenylhydrazine)
RN 97189-44-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 67493-04-9
CMF C15 H11 N O S

CM 2

CRN 7601-90-3
CMF Cl H O4

L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 140455-64-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[4-nitrophenyl]-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 106274-64-8
CMF C14 H8 N2 O3 S

CM 2

CRN 7601-90-3
CMF Cl H O4

L4 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:184536 CAPLUS
DOCUMENT NUMBER: 116:184536
TITLE: Silver halide photographic material with good storage stability
INVENTOR(S): Ishiguro, Seiji; Shishido, Tadao; Meguro, Kanji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03229241	A	19911011	JP 1990-24227	19900202
PRIORITY APPLN. INFO.:			JP 1990-24227	19900202

GI

AB The title material contains benzothiazinone I [R1 = (substituted) alkyl, aryl; R2-5 = H, halo, CN, (substituted) alkyl, alkoxy, amino, acylamido, sulfonamido, carbamoyl, sulfamoyl, carboxyl, sulfonyl, carboxylate, sulfonate; R2 and R3, R3 and R4, and R4 and R5 may form 5- or 6-membered ring] in the emulsion or other hydrophilic colloid layers.
IT 7474-08-0 160429-89-6
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. material containing, for storage stability)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

RN 160429-89-6 CAPLUS
CN Benzoic acid, 4-[4-oxo-4H-1,3-benzothiazin-2-yl]-, methyl ester (CA INDEX

L4 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
NAME)

L4 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:97722 CAPLUS
DOCUMENT NUMBER: 116:97722
TITLE: Electroreduction of organic compounds. 19. Formation of benzoannellated sulfur heterocycles by intramolecular cathodic cyclization of dithiocarboxylic esters
AUTHOR(S): Gade, Thomas; Streek, Michael; Voss, Juergen
CORPORATE SOURCE: Inst. Org. Chem., Univ. Hamburg, Hamburg, D-2000/13, Germany
SOURCE: Chemische Berichte (1992), 125(1), 127-41
CODEN: CHEBAN; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 116:97722
AB Cathodic reduction of aryl and benzyl dithiopivaloates and related dithioesters with leaving groups at the benzene ring or a side chain yield the sulfur heterocycles. The product depended on the nature of the starting material and the reaction conditions. In the case of e-oxo-dithioesters, thioindigo is formed. The thioamides show a strong tendency to reductive dehalogenation but the S,N-heterocycles are also formed in minor amts. The formation of the rearranged products is discussed in terms of C,S-splitting in the primarily formed radical anion and subsequent C,C-coupling of the fragments and follow-up reactions.
IT 137092-58-1P
RL: PREP (Preparation)
(preparation of, electrochem.)
RN 137092-58-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(1,1-dimethylethyl)- (CA INDEX NAME)

L4 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:21013 CAPLUS
DOCUMENT NUMBER: 116:21013
TITLE: A new regcylation of 1,3-heterocyclic cations to benzimidazolium and perimidinium cations
AUTHOR(S): Vedernikova, I. V.; Konstantinchenko, A. A.; Nyakhkhu, Yu. I.
CORPORATE SOURCE: Inst. Org. Phys., Univ. Rostov, Rostov-on-Don, 344121, USSR
SOURCE: Bulletin des Societes Chimiques Belges (1993), 102(2), 175-81
CODEN: BSCBAG; ISSN: 0037-9646
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 116:21013
AB Reaction of 1,3-heterocyclic cations, such as benzoxazinonium, benzothiazolium, or dithiazinium cations, with o-phenylenediamines or 1,8-naphthalenediamines gave benzimidazolium and perimidinium cations.
IT 97199-42-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phenylenediamines and naphthalenediamines)
RN 97199-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
CMF Cl H O4

CM 2

CRN 7474-08-0
CMF C14 H9 N O S

L4 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1990:215913 CAPLUS
DOCUMENT NUMBER: 112:215913
TITLE: Ring-transformation reactions of 1,3-benzothiazines. Part 5. Saturated heterocycles. Part 140. Synthesis of benzisothiazoles by the oxidative ring contraction of 2-aryl-4H- and 4-aryl-2H-1,3-benzothiazines
AUTHOR(S): Szabo, Janos; Szucs, Erzsebet; Fodor, Lajos; Katocs, Agnes; Bernath, Gabor
CORPORATE SOURCE: Gyogyszereszi Vegytani Intez., Szent-Gyorgyi Albert Orvostudo. Egyet., Szeged, 6701, Hung.
SOURCE: Magyar Kemiai Folyoirat (1989), 95(11), 455-61
CODEN: MKFAJL; ISSN: 0025-0255
DOCUMENT TYPE: Journal
LANGUAGE: Hungarian
OTHER SOURCE(S): CASREACT 112:215913
GI

I

II

III

IV

V

VI

AB Dimethoxyphenylbenzothiazine (I) was oxidized with H2O2 to yield the dioxide (II). KMnO4 oxidation of I gave benzothiazin-4-one (III) (R = OMe); which was oxidized with calculated amts. of perbenzoic acid to obtain the corresponding 1-oxide and 1,1-dioxide. Oxidation of III (R = MeO, EtO, H) with NaIO4 involved ring contraction, yielding benzisothiazolone 1-oxides (IV). A similar ring transformation was observed in the oxidation of aryl benzothiazines (V) (R = alkoxy, Ar = substituted Ph), resulting in the formation of arylsulfonylbenzisothiazolas (VI). The mechanism of these ring transformations is discussed.

L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
IT 117999-13-0
RL: FRP (Properties)
(intermediary of, in oxidative ring closure of arylbenzothiazine derivative)
RN 117999-13-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl-, 1-oxide (CA INDEX NAME)

IT 7474-08-0 101734-42-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidative ring contraction of, with sodium periodate)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

RN 101734-42-3 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)

IT 117999-12-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and hydrogenation/ring-contraction sequence of)
RN 117999-12-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl-, 1-oxide (CA INDEX NAME)

L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

IT 56755-15-8P
RLs SPN (Synthetic preparation); PREP (Preparation)
(preparation and oxidation and oxidative ring contraction of, with sodium periodate)
RN 56755-15-8 CAPLUS
CN 4H-1,7-Benzothiazin-4-one, 8,7-dimethoxy-2-phenyl- (CA INDEX NAME)

IT 117999-14-1P
RLs SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 117999-14-1 CAPLUS
CN 4H-1,7-Benzothiazin-4-one, 8,7-dimethoxy-2-phenyl-, 1,1-dioxide (CA INDEX NAME)

L4 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:135187 CAPLUS
DOCUMENT NUMBER: 110:135187
TITLE: Activated nitriles in heterocyclic synthesis: a new approach for the synthesis of thiazinone, quinazolinone, and benzimidazole derivatives
AUTHOR(S): Ibrahim, Nadia Sobhy; Shaaa, Moda Saki Mohamed, Moha Nassan; Elnagdi, Mohamed Hilmy
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Cairo, Egypt
SOURCE: Chemistry & Industry (London, United Kingdom) (1988), (17), 563-4
CODEN: CHINAG; ISSN: 0009-7068
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:135187
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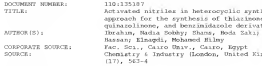

AB Cyclocondensation of ClCOC(NHZ)=CRCN (R = COOEt, Bz) with 1,2-R1C6H4R2 (R1 = NHZ, R2 = NHZ, OH; R1 = SH, NHZ; R2 = COOH) or RSCHCOOCOR gave heterocycles I (X = NH, O) and II (A = S, NH) and thiazole III, resp.
IT 113707-18-5P 113707-23-2P
RLs SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 113707-18-5 CAPLUS
CN 4H-1,7-Benzothiazine-2-acetic acid, α-cyano-4-oxo-, ethyl ester (CA INDEX NAME)

RN 113707-23-2 CAPLUS
CN 4H-1,7-Benzothiazine-2-acetonitrile, α-benzoyl-4-oxo- (CA INDEX NAME)

L4 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:38956 CAPLUS
DOCUMENT NUMBER: 110:38956
TITLE: Nitriles in heterocyclic synthesis: 1-cyanoformanilide as precursor for a variety of heterocyclic ring systems
AUTHOR(S): Sherif, Sherif Mourad; Nohareb, Rafaat Niaz; Elgemeie, Galal Eldin H.; Singh, Rajendra Prasad
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
SOURCE: Heterocycles (1988), 27(7), 1573-83
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:38956
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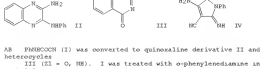

AB PANHCOCN (I) was converted to quinoxaline derivative II and other heterocycles
III (Z1 = O, NH). I was treated with o-phenylenediamine in DMF containing
piperidine to give II. III (Z1 = O) was prepared from I, salicylic acid, and H2SO4 in EtOH. Pyrrolinone IV was obtained from I and CH2(CN)2.
IT 113372-84-4P
RLs SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 113372-84-4 CAPLUS
CN 4H-1,3-Benzothiazine-2-carboxamide, 4-oxo-N-phenyl- (CA INDEX NAME)

L4 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:8142 CAPLUS
DOCUMENT NUMBER: 110:8142
TITLE: Ring transformations of 1,3-benzothiazines. 5. Synthesis of benzisothiazoles by the oxidative ring contraction of 2-aryl-4H- and 4-aryl-2H-1,3-benzothiazines
AUTHOR(S): Szabo, Janos; Szucs, Erzsebet; Fodor, Lajos; Katocs, Agnes; Bernath, Gabor; Schar, Pal
CORPORATE SOURCE: Inst. Pharm. Chem., Albert Szent-Gyorgyi Med. Univ., Szeged, H-6701, Hung.
SOURCE: Tetrahedron (1988), 44(10), 2985-92
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 110:8142
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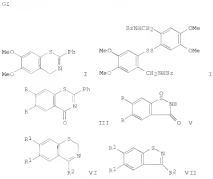
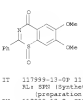


AB 4H-1,3-Benzothiazine 1 was oxidized with HIO2 to give disulfide II, whereas the oxidation of 1 with MMPP gave 4H-1,3-benzothiazine-4-one III (R = OMe) (IV). Oxidation of IV with calculated amts. of perbenzoic acid gave the corresponding 1-oxide and 1,1-dioxide. III (R = OMe, H, OEt) were oxidized with NaIO4 to give 1,2-benzisothiazol-3(2H)-ones V (R = same). 2H-1,3-Benzothiazines VI (R1 = OMe, R2 = Ph, C6H4Me-4, C6H4Cl-2, C6H4Cl-4, C6H3(OMe)2-3,4', R3 = OEt, R2 = Ph) were oxidized with NaIO4 to give the corresponding 1,2-benzisothiazoles VII.
IT 7474-08-8 107734-42-3

L4 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 117999-12-9P 117999-14-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 117999-12-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl-, 1-oxide (CA INDEX NAME)

RN 117999-14-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl-, 1,1-dioxide (CA INDEX NAME)

L4 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidative ring contraction of)
RN 7474-08-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

RN 107734-42-3 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)

IT 56755-15-9P 117999-12-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidative ring contraction of)
RN 56755-15-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

RN 117999-12-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl-, 1-oxide (CA INDEX NAME)

L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:515548 CAPLUS
DOCUMENT NUMBER: 107:115548
TITLE: Nitriles in heterocyclic synthesis: a route for synthesis of functionally substituted thiazinones
AUTHOR(S): Abed, Nourat M.; Ibrahim, Nadia S.; Aziz, Suzan I.
CORPORATE SOURCE: Chem. Dep., Fac. Sci., Giza, Egypt
SOURCE: Revista Portuguesa de Quimica (1985), 27(3-4), 459-62
CODEN: RPQUAT; ISSN: 0035-0419
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:115548
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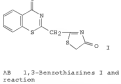

AB 1,3-Benzothiazines I and II (Z1 = NNHPh, CHPh) were prepared The reaction of 2-HSC6H4CO2H with a thiazolinesacetonitrile derivative gave I. II (Z1 = CHPh) was obtained from 2-HSC6H4CO2H and PhCH:C(CN)2.
IT 67433-02-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(cycloaddn. of/cyclocondensation and condensation reactions of)
RN 67433-02-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

IT 107009-43-2P 109419-37-6P 109419-38-7P 109419-39-8P 109419-40-1P 109419-41-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 107009-43-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylhydrazono)- (9CI) (CA INDEX NAME)

L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 109419-39-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[(4,5-dihydro-4-oxo-2-thiazolyl)methyl]- (CA INDEX NAME)

RN 109419-38-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylmethylene)- (CA INDEX NAME)

RN 109419-39-8 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[hydroxy(phenylamino)methylene]-4-oxo- (CA INDEX NAME)

L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 109419-40-1 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[mercapto(phenylamino)methylene]-4-oxo- (CA INDEX NAME)

RN 109419-41-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-(aminohydroxymethylene)-4-oxo- (CA INDEX NAME)

L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:458953 CAPLUS
DOCUMENT NUMBER: 107:58953
TITLE: Nitriles in heterocyclic synthesis: a route for synthesis of functionally substituted thiazinones
AUTHOR(S): Mostafa Abed, Nosrat; Ibrahim, Nadia Bobbi
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
SOURCE: Journal of the Chemical Society of Pakistan (1986), 8(3), 319-22
CODEN: JCSPDF, ISSN: 0253-5106
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:58953
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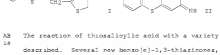


AB The reaction of thioallylic acid with a variety of activated nitriles is described. Several new benzo[e]-1,3-thiazinones, e.g. I and II are reported.
IT 107008-63-2P 109419-37-4P 109419-38-7P
109419-39-8P 109419-40-1P 109419-41-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 107008-63-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylhydrazono)- (9CI) (CA INDEX NAME)

RN 109419-37-4 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[(4,5-dihydro-4-oxo-2-thiazolyl)methyl]- (CA INDEX NAME)

L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

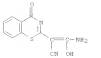
RN 109419-38-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylmethylene)- (CA INDEX NAME)

RN 109419-39-8 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[hydroxy(phenylamino)methylene]-4-oxo- (CA INDEX NAME)

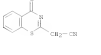
RN 109419-40-1 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[mercapto(phenylamino)methylene]-4-oxo- (CA INDEX NAME)

RN 109419-41-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-(aminohydroxymethylene)-4-oxo- (CA INDEX NAME)

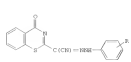
L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



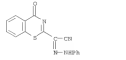
IT 67433-02-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactions of)
RN 67433-02-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)



L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:101585 CAPLUS
DOCUMENT NUMBER: 106:101585
TITLE: Ionization and electroreduction of some benzothiazin-4-one azo dyes
AUTHOR(S): Abed, N. M.; Nashed, S.; Fahmy, H. M.; Aiken, M-Abdel
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
SOURCE: Monatshefte fuer Chemie (1986), 117(5), 599-605
CODEN: MOCMB7; ISSN: 0026-9247
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

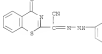


AB The pKa values of benzothiazin-4-ones I (R = H, 3-Cl, 6-Cl, 7-Me, 4-Ne, 3-NO2, 6-NO2) together with a model 2-(cyanomethyl)-4H-3,1-benzothiazin-4-one were determined spectrophotometrically in alc. buffered media. These values were correlated to different σ sets. The polarog. behavior of I (R = H, 6-NO2) was studied in detail. The obtained data showed that I (R = H) is reduced via a 2-electron process to the corresponding hydrazo form, which was stabilized through H bonding.
IT 107009-63-2 107009-67-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(ionization and polarog. reduction of)
RN 107009-63-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-4-(phenylhydrazono)- (9CI) (CA INDEX NAME)

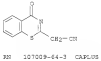


RN 107009-67-6 CAPLUS

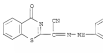
L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[(4-nitrophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)



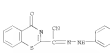
IT 67433-02-7 107009-64-3 107009-65-4
107009-66-5 107032-75-7 107032-76-8
RL: PROC (Process)
(ionization of, in alc. buffered media)
RN 67433-02-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)



RN 107009-64-3 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[(3-chlorophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)

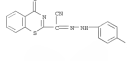


RN 107009-65-4 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[(3-methylphenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)



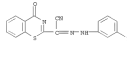
RN 107009-66-5 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[(4-methylphenyl)hydrazono]-4-

L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
oxo- (9CI) (CA INDEX NAME)



RN 107032-75-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[(4-chlorophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)

RN 107032-76-8 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[(3-nitrophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:144960 CAPLUS
DOCUMENT NUMBER: 125:144960
ORIGINAL REFERENCE NO.: 125:27209a,27212a
TITLE: 7The new ligand 1,3-diphenyl-5-(o-mercaptophenyl)-1,2,4-triazole. 7Preparation and mode of coordination to metals
AUTHOR(S): Garnovskii, A. D.; Kozhavina, O. B.; Ryabukhin, Yu. I.
CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
SOURCE: Koordinatsionnaya Khimiya (1996), 12(6), 853-4
CODEN: KOKHDC; ISSN: 0132-344X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB 1,3-Diphenyl-5-(o-mercaptophenyl)-1,2,4-triazole (HL) was prepared by boiling in AcAc solution 4-hydroxy-1,3-benzothiazinium perchlorate and phenylhydrazine with subsequent treating with H2O. NiL2 (M = Co, Ni) were prepared and characterized by IR spectra. NiL2 is squate planar whereas CoL2 is polymeric octahedral. The ligand coordinates through the S and N(4) atoms. Aerial oxidation of HL gave the corresponding disulfide.
IT 97189-42-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phenylhydrazine)
RN 97189-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

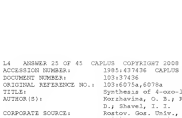
CRN 7601-90-3
CMF Cl H O4

CM 2

CRN 7474-08-0
CMF C14 H9 N O S

L4 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:437436 CAPLUS
DOCUMENT NUMBER: 103:37436
ORIGINAL REFERENCE NO.: 103:6075a,6078a
TITLE: Synthesis of 4-oxo-1,3-benzothiazines and their salts
AUTHOR(S): Kozhavina, O. B.; Ryabukhin, Yu. I.; Garnovskii, A. D.; Shavel, Z. Z.
CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, 334077, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1985), (4), 562-3
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 103:37436
GI



AB Cyclocondensation of o-HSC6H4CO2R with RCN (R = Ph, PhCH2) in dioxane containing HCl and 70% HClO4-Ac2O gave 60-70% complexes I which were treated with H2O or EtOH to give benzothiazines II; reorgan. of the complexes from AcOH or the action of heat gave 97 and 75% perchlorates III which could also be converted to II.
IT 97189-42-9P 97189-44-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)
RN 97189-42-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
CMF Cl H O4

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

CRN 7474-08-0
CMF C14 H9 N O S

RN 97189-44-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 67433-04-9
CMF C15 H11 N O S

CM 2

CRN 7601-90-3
CMF Cl H O4

IT 7474-08-0P 67433-04-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction with perchloric acid)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 67433-04-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)

IT 97189-43-0P 97189-45-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation, hydrolysis, and thermal decomposition of)
RN 97189-45-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate, compd. with 1,4-dioxane (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 123-91-1
CMF C4 H8 O2

CM 2

CRN 97189-42-9
CMF C14 H9 N O S . C1 H O4

CM 3

CRN 7601-90-3
CMF C1 H O4

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 4

CRN 7601-90-3
CMF C1 H O4

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 4

CRN 7474-90-0
CMF C14 H9 N O S

RN 97189-45-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)-, perchlorate, compd. with 1,4-dioxane (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 123-91-1
CMF C4 H8 O2

CM 2

CRN 97189-44-1
CMF C15 H11 N O S . C1 H O4

CM 3

CRN 67433-04-9
CMF C15 H11 N O S

L4 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:67353 CAPLUS
DOCUMENT NUMBER: 102:6351
ORIGINAL REFERENCE NO.: 102:1151a,1154a
TITLE: Nitriles in heterocyclic synthesis: a new approach for the synthesis of thiazinones
AUTHOR(S): Ibrahim, Nadia S.; Abed, Nezrat M.; Kandeel, Zaghloul E.
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
SOURCE: Heterocycles (1984), 22(8), 1677-82
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 102:6351
GI

AB The benzothiazinones I (R = cyano, CONH2, COMePh, CO2Et) were prepared in 60-90% yields by cyclization of o-RSC6H4CO2H with NCSCN. Reaction of o-RSC6H4CO2H with ClSCCN gave the thiazinone derivative II in 80% yield.
IT 67433-02-7P 67433-03-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with thioalkylic acid)
RN 67433-02-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

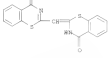
RN 67433-03-8 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester (CA INDEX NAME)

L4 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

IT 67433-05-0P 93666-41-2P 93666-42-3P
93666-44-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 67433-05-0 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)

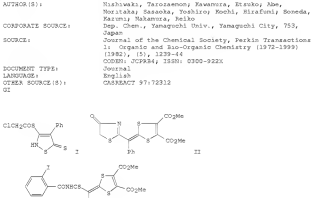
RN 93666-41-2 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo-N-phenyl- (CA INDEX NAME)

RN 93666-42-3 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2,3-dihydro-2-[(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]- (CA INDEX NAME)



RN 93666-44-5 CAPLUS
CN 4H-1,3-Benzothiazine-2-ethanethioamide, .alpha.-[1-amino-2-(4-oxo-4H-1,3-benzothiazin-2-yl)ethylidene]-4-oxo- (CA INDEX NAME)

L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:472212 CAPLUS
DOCUMENT NUMBER: 97:72212
ORIGINAL REFERENCE NO.: 97:12105a,12108a
TITLE: Studies of heterocyclic chemistry. Part 25. Intramolecular cyclizations of N-acylarylethanethioamides leading to thiazoles, 4H-1,3-thiazines, 4H-pyrido[3,2-e]-1,3-thiazines, and 4H-1,3-benzothiazines
AUTHOR(S): Nishiwaki, Tarozaemon; Yawamura, Etsuko; Abe, Noritaka; Sasaoka, Yoshiro; Kochi, Hirafumi; Soneda, Kazumi; Nakamura, Reiko
CORPORATE SOURCE: Dep. Chem., Yamaguchi Univ., Yamaguchi City, 753, Japan
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1982), (5), 1239-44
CODEN: JCPKBH; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 97:72312
GI



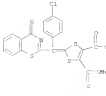
AB Cycloaddn. reactions of 4-aryl-2-haloacylthio-, 4-aryl-3-(2-chloroethoxycarbonylthio)-, and 4-aryl-3-(o-halobenzoylthio)-2-isothiazoline-5-thiones with acetylenes gave (acetyldihydrothiazolylmethylene)-, (acetyldihydrothiazinylmethylene)-, and (acetyridothiazinylmethylene)dithiane s. E.g., refluxing isothiazolinethione I with MeO2CC.tplbond.CCO2Me gave 82% thiazolone II. Intramol. photochem. cycloconddensation reactions of N-o-halobenzoyl[1,2-dithiol-2-ylidene]arylethanethioamides gave (acetbenzothiazinylmethylene)dithiolen. E.g., irradiation of

L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
lodobenzoylthioamide III in THF under N for 10 h gave 67% benzothiazinone IV
IT 78959-04-3P 78959-05-4P 78959-06-5P
78959-07-6P 82491-22-3P 82491-23-4P
82491-24-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 78959-04-3 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, dimethyl ester (9CI) (CA INDEX NAME)

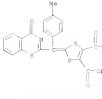
RN 78959-05-4 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

RN 78959-06-5 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-chlorophenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

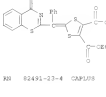
L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 78959-07-6 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, diethyl ester (9CI) (CA INDEX NAME)

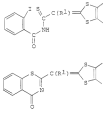


RN 82491-22-3 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, diethyl ester (9CI) (CA INDEX NAME)

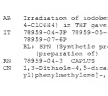


RN 82491-23-4 CAPLUS

L4 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:515430 CAPLUS
DOCUMENT NUMBER: 95:115430
ORIGINAL REFERENCE NO.: 95:19379a,19376a
TITLE: A new and efficient approach to a 4H-1,3-benzothiazine ring that utilizes the photocyclization of N-o-iodobenzoylthioamides: the ring transformation of isothiazoles
AUTHOR(S): Nishiwaki, Tarozaemon; Kawamura, Etsuko; Abe, Noritaka; Sasaoka, Toshiro; Kochi, Hirafumi
CORPORATE SOURCE: Fac. Sci., Yamaguchi Univ., Yamaguchi, 753, Japan
SOURCE: Heterocycles (1981), 16(7), 1203-4
CODEN: HTCYAM; ISSN: 0385-5414
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 95:115430
GI



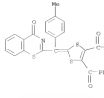
I



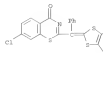
II

AB Irradiation of iodobenzoylthioamides I (R = Me, Et; R1 = Ph, 4-MeC6H4, 4-ClC6H4) in THF gave 83-93% benzothiazinones II.
IT 78959-04-9P 78959-05-0P 78959-06-5P
78959-07-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 78959-04-9 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, dimethyl ester (9CI) (CA INDEX NAME)

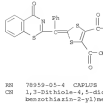
L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN 4H-1,3-Benzothiazin-4-one, 2-[(4,5-dibenzoyl-1,3-dithiol-2-ylidene)(4-methylphenyl)methyl]- (CA INDEX NAME)



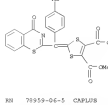
RN 82491-24-5 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(7-chloro-4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, dimethyl ester (9CI) (CA INDEX NAME)



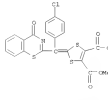
L4 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 78959-05-4 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

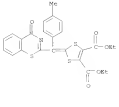


RN 78959-06-5 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-chlorophenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)



RN 78959-07-6 CAPLUS
CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, diethyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:567097 CAPLUS
DOCUMENT NUMBER: 93:167097
ORIGINAL REFERENCE NO.: 93:26559a,26602a
TITLE: Studies in organic mass spectrometry. I. Electron impact-induced fragmentation of 2-substituted 4H-1,3-benzothiazin-4-ones
AUTHOR(S): Ceraulo, Leopoldo; Spoerlino, Pasquale; Ferrugia, Mirella; Giammola, Libero Italo
CORPORATE SOURCE: Fac. Farm., Univ. Palermo, Palermo, 1-90123, Italy
SOURCE: Annali di Chimica (Rome, Italy) (1977), 67(9-12), 707-19
CODEN: ANCHAI; ISSN: 0003-4592
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The mass spectra of eleven 2-substituted 2,3-dihydro-4H-1,3-benzothiazin-4-ones, five 2-substituted 4H-1,3-benzothiazin-4-ones and two tetracyclic derivs. containing an imidazole and a thiazole ring are described. The fragmentation patterns have been studied by means of high resolution measurements, metastable ion detection, and D labeling.
IT 75096-85-4
RL: PYP (Properties)
(mass spectrum of)
RN 75096-85-4 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(2-hydroxyphenyl)- (CA INDEX NAME)

L4 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1978:509206 CAPLUS
DOCUMENT NUMBER: 89:109206
ORIGINAL REFERENCE NO.: 89:16821a,16824a
TITLE: Heterocycles by reaction of mercapto- and hydroxycarboxylic esters with activated nitriles
AUTHOR(S): Satzinger, Gerhard
CORPORATE SOURCE: Forschungsinst., Goedecke A.-G., Freiburg/Br., Fed. Rep. Ger.
SOURCE: Justus Liebigs Annalen der Chemie (1978), (3), 473-511
CODEN: JLACBF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 89:109206
GI

AB The title reaction of R3CH2CN (R = H, Ph; R1 = CO2Et, CN, Br, Ph, pyridyl, CONH2, etc.) with RSCOCH2X (X = CH2, CHPh, CH(2, CH2CH2, o-C6H4; R2 = Me, Et), HOCHRCO2R2 (R2 = H, Ph, p-tolyl, 2-furyl, 2-pyridyl; R2 = Et, Bz), and RCHCHCO2Et gave heterocycles I (R = H, Ph; R1 = CO2Et, CN, Bz, etc.; X = CH2, CHPh, CH2, o-C6H4, 2-furylmethylene, etc.; R2 = O, S, NH, which existed in equilibrium with II. These compds. were alkylated at the ring N in the form of I, usually with the fixation of S-configuration; under more severe conditions, some were also alkylated at C-3. The ring of I, especially when R1 = H, was very stable; thus, I reacted with electrophiles at the 5- or 6-position without ring cleavage. I (R = H, R1 = CN, X = o-C6H4, R2 = Et) and its alkylation products were hydrolyzed to the resp. carboxylic acids or amides, e.g., I (R2 = CO2H, CONH2) without disturbing the heterocyclic ring. The alkylation products III (R2 = EtO, BnO, Ph; R3 = Me, MeCHCH2CH2, 2-piperidinoethyl) underwent ring expansion to IV upon prolonged contact with EtOH. Some I and their products are useful as choleretic, diuretic, antimycotic, and central depressive agents (no data).
IT 67433-02-7P 67433-03-8P 67433-04-9P
67433-05-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 67433-02-7 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

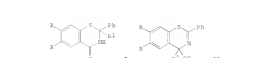
L4 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 67433-03-8 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester (CA INDEX NAME)

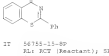
RN 67433-04-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)

RN 67433-05-0 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)

L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1976:431282 CAPLUS
DOCUMENT NUMBER: 85:31282
ORIGINAL REFERENCE NO.: 85:3473a,3474a
TITLE: Synthesis of 2,2- and 2,4-substituted 1,3-benzthiazines
AUTHOR(S): Szabo, J.; Varga, I.
CORPORATE SOURCE: Dep. Pharm. Chem., Med. Univ., Szeged, Hung.
SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1976), 88(1), 61-6
CODEN: ACASAG; ISSN: 0001-5407
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 85:31282
GI



AB Alkylbenzothiazinones [I, R = H, R1 = Et, PhCH2; R = MeO, R1 = Et, Bu, PhCH2) were obtained in 19.5-38.2% yields by alkylation of the corresponding benzothiazinone with RlMgX (X = halo). Analogously obtained were 38.2-40.5% II (R = H, MeO, R1 = Ph).
IT 7474-08-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkylation of, by ethylmagnesium bromide)
RN 7474-08-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)



IT 56755-15-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and alkylation of)
RN 56755-15-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

L4 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2000 ACS on STN (Continued)

L4 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2000 ACS on STN
ACCESSION NUMBER: 1974:6890 CAPLUS
DOCUMENT NUMBER: 84:4890
ORIGINAL REFERENCE NO.: 84:825a,828a
TITLE: Cyanogen-2-mercaptobenzoic acid condensations. Route to bis-1,3-benzothiazin-4-ones
AUTHOR(S): Heindel, Ned D.; Schaeffer, Lee A.
CORPORATE SOURCE: Dept. Health Sci., Lehigh Univ., Bethlehem, PA, USA
SOURCE: Journal of Heterocyclic Chemistry (1975), 12(4), 783-4
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The bisbenzothiazinones I (R = R1 = H, Cl; R = Cl, Me, R1 = H) were prepared
[21-95%) by treating 2,2,5-(RS)R1C6H2CO2H with NCCN.
IT 57446-13-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 57446-13-4 CAPLUS
CN 4H-1,3-Benzothiazine-2-carboxamide, 6-methyl-4-oxo- (CA INDEX NAME)

L4 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2000 ACS on STN
ACCESSION NUMBER: 1975:147442 CAPLUS
DOCUMENT NUMBER: 82:147442
ORIGINAL REFERENCE NO.: 82:23163a,23166a
TITLE: Reaction of 4H-1,3-benzothiazin-4-ones with Grignard reagents
AUTHOR(S): Varga, Istvan; Szabo, Janos; Sohar, Pal
CORPORATE SOURCE: Pharm.-Chem. Inst., Med. Univ. Szeged, Szeged, Hung.
SOURCE: Chemische Berichte (1975), 108(8), 2523-30
CODEN: CHBMAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 82:147442
GI For diagram(s), see printed CA Issue.
AB Benzothiazinone I reacted with Grignard reagents R1MgBr to give dihydrobenzothiazinones II (R = H, R1 = Et, CH2Ph; R = MeO, R1 = Et, Bu, CH2Ph) and benzothiazinols III (R = H, MeO; R1 = Ph). PhCH2MgBr gave, in addition to II (R = MeO, R1 = CH2Ph), benzylidenebenzothiazine IV, probably
formed via intermediate III (R = MeO, R1 = CH2Ph).
IT 7474-08-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with Grignard reagent)
RN 7474-08-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

IT 56755-15-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with Grignard reagents)
RN 56755-15-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1969:491408 CAPLUS
DOCUMENT NUMBER: 71:91408
ORIGINAL REFERENCE NO.: 71:17219a,17022a
TITLE: Synthesis and study of 1,3-benzothiazines. II. Chemical study of the compounds obtained
AUTHOR(S): Bourgoin-Legay, Daniele; Boudet, Roger
CORPORATE SOURCE: Lab. Chim. Org., Fac. Sci. Dakar, Dakar, Senegal
SOURCE: Bulletin de la Societe Chimique de France (1969), (7), 2524-30
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 71:91408
AB Treatment of 2-alkyl-4H-1,3-benzothiazines (I) with air or H2O2 results in preferential oxidation of the S atom, rather than of the 4-CH2 group. Although the corresponding 2-aryl compds. are resistant to air oxidation, careful treatment with KMnO4 in Me2CO solution leads to either S oxidation or 4-CH2 oxidation, or to oxidation at both positions, depending on exact conditions. Reaction of I with AgNO3 and alkylation with MeI results in exclusive substitution at the 4-position. A number of other oxidation, substitution, and addition reactions are described. Refluxing 0.7 g. 2-methyl-4H-1,7-benzothiazine (II) in 20 ml. concentrated HCl 24 hrs. and basification gave 0.7 unchanged II, but further treatment of the alkaline filtrate with BzCl yielded 50% N,S-dibenzoyl derivative of 2-mercaptobenzylamine. Heating 2 g. 2-phenyl-4H-1,3-benzothiazine (III) in 20 ml. 50% H2SO4 6 hrs. gave 90%, 0.6 g. PhCO2H, and 0.5 g. benzisothiazole. Upon being exposed to air 2 months, 1 g. II afforded approx. 0.5 g. 2-methyl-1-oxo-4H-1,3-benzothiazine (IV), m. 158° (EtOH). Similarly prepared were 2-ethyl-1-oxo-4H-1,7-benzothiazine (V), m. 177-8° (EtOH), and 2-isopropyl-1-oxo-4H-1,7-benzothiazine, m. 179-80° (H2O-EtOH). Treatment of 1 g. II in 40 ml. AcOH with 40 ml. dilute H2O2 4.5 hrs. afforded 64% IV. Under these conditions, V was obtained in 72% yield, but 2-(p-anisyl)-4H-1,3-benzothiazine (VI) remained unaffected. A solution of 4.5 g. III in 270 ml. Me2CO was stirred with 10.2 g. KMnO4 4 hrs., kept another 12 hrs., filtered, evaporated, and the residue extracted with PrOH to give 4-oxo-2-phenyl-1,7-benzothiazine (VII), m. 152.5-3°. Reaction of 1 g. III with 2 g. KMnO4 in 60 ml. Me2CO 3 hrs., addition of 20 ml. concentrated HCl and dilution with 200 ml. H2O afforded 0.3 g. 2,2-dihydro-1,4-dioxo-2-phenyl-1,3-benzothiazine (VIII), m. 202-4°, and 0.1 g. mixture containing VII and VIII. Stirring a mixture of 1 g. 2,3-dihydro-4-oxo-2-phenyl-1,3-benzothiazine and 1 g. KMnO4 in 30 ml. Me2CO at room temperature 24 hrs., heating on a steam bath 1 hr., and addition of 10 ml. concentrated HCl and 150 ml. H2O yielded 0.3 g. VIII. Starting from VI,

L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
2-(p-anisyl)-4-oxo-1,3-benzothiazine, m. 178.5-9.5° (PrOH), and 2-(p-anisyl)-2,3-dihydro-1,4-dioxo-1,3-benzothiazine, m. 221° (PhCO2EtOH), were prepd. via simlar procedures. Likewise, oxidn. of 2-(p-bromophenyl)-4H-1,3-benzothiazine (IX) led to 2-(p-bromophenyl)-4-oxo-1,3-benzothiazine, m. 157.5-8° (PrOH), and 2-(p-bromophenyl)-2,3-dihydro-1,4-dioxo-1,3-benzothiazine, m. 207° (PhCO2Et). Under these conditions, II yielded only tar. A soln. of 3 g. 2-ethyl-4H-1,3-benzothiazine in 10 ml. EtOH was treated with 3 g. AgNO3 in 5 ml. H2O and 20 ml. EtOH, the insol. Ag salt salt added to a soln. of 1 ml. MeI in 70 ml. PhMe, and the mixt. stirred at room temp. 1 hr. and at 56° 2.5 hrs. to give 0.44 g. 2-ethyl-4-methyl-1,3-benzothiine, m. 90-1° (CS2-pet. ether). Similar reaction of IV furnished an unstable Ag salt which was treated directly with MeI in EtOH at room temp. to give 2,4-dimethyl-1-oxo-1,7-benzothiazine, m. 30.2° (CCl4). Bromine addn. of 4 ml. 29% Br in CCl4 to 1 g. III in 70 ml. CHCl3 gave 1.3 g. red solid, C14H11BrCSN, m. 145°. Treatment of this compd. with hot PrOH gave VII. Brominations were likewise studied with VI, IX, and 2-(p-nitrophenyl)-4H-1,3-benzothiazine, but complex mixts. of products were obtained.

IT 7474-08-0P 23574-20-1P 23574-21-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

RN 23574-20-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-methoxyphenyl)- (9CI) (CA INDEX NAME)

RN 23574-21-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-bromophenyl)- (8CI) (CA INDEX NAME)

L4 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1967:443770 CAPLUS
DOCUMENT NUMBER: 67:43770
ORIGINAL REFERENCE NO.: 67:8217a,8218a
TITLE: Lithium aluminum hydride hydrogenation test on a 1,3-benzothiazine
AUTHOR(S): Bourgoin-Legay, Daniele; Boudet, Roger
CORPORATE SOURCE: Univ. Dakar, Dakar, French West Africa
SOURCE: Comptes Rendus des Seances de l'Academie des Sciences, Serie C: Sciences Chimiques (1967), 264(15), 1304-6
CODEN: CRCHAQ; ISSN: 0567-6541
DOCUMENT TYPE: Journal
LANGUAGE: French
GI For diagram(s), see printed CA Issue.
AB The reduction of 2-phenyl-4-oxo-1,3-benzothiazine (I) with LiAlH4 led, unexpectedly, to 3 products: 2-mercaptobenzylamine (Ia), benzisothiazole (II), and benzyl alc. These provided an interesting confirmation of the initial structure. I (9.6 g.) was treated with 2.5 g. LiAlH4 in 50 ml. anhydrous ether. The mixture was extracted 6 hrs., heated 5 hrs., cooled, 10 ml. H2O+ added carefully, and then 70 ml. 1:1 HCl-H2O added. The aqueous phase was made alkaline, and approx. 1 g. benzisothiazole was obtained. Excess BzCl (15 ml.) was added to the aqueous solution to yield 10 g. precipitate, m. 141°, identical with the N,S-dibenzoylated derivative of Ia (CA 64: 15782e). Evaporation of the solvent from the ether phase and distillation of the residue yielded 3.8 g. benzyl alc.
IT 7474-08-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of, with lithium tetrahydroaluminate)

RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

L4 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1962:475856 CAPLUS
DOCUMENT NUMBER: 57:75956
ORIGINAL REFERENCE NO.: 57:13105a-g
TITLE: Synthesis and biological activity of some 4-(substituted-amino)pyrimidines
AUTHOR(S): Segal, Bayny Hedgcoth, Charles; Skinner, Charles G.
CORPORATE SOURCE: Univ. of Texas, Austin
SOURCE: Journal of Medicinal & Pharmaceutical Chemistry (1962), 5, 871-6
CODEN: JMPCAG; ISSN: 0095-9065
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A series of 33 4-[substituted-amino]pyrimidines were prepared and tested for
their effect on the rate of seed germination. None of the compds.
enhance
the rate of germination and all were relatively non-toxic to the seed.
From these results as well as earlier tests it appears that the purine
nucleus is essential for producing analogs with kinetin-like activity. A
mixture of 2.80 g. 2,4-dimercaptopyrimidine and 4.38 g. BuNH2 was
refluxed 5
hrs., cooled, 50 ml. H2O added, and the precipitate re-crystallized from
MeOH to give
7.2 g. 4-butylamino-2-pyrimidinethiol, m. 212-14° (decomposition).
Prepared similarly were: 4-isopentylamino-2-pyrimidinethiol, m.
198-9° (decomposition); 4-n-hexylamino-2-pyrimidinethiol, m.
202-4° (decomposition); and 4-n-heptylamino-2-pyrimidinethiol, m.
179-80° (decomposition). 4-n-Pentylamino-2-pyrimidinethiol (5.9 g.),
2.83 g. chloroacetic acid, and 35 ml. H2O was heated 1 hr., cooled,
evaporated
to dryness in vacuo, and the residue recrystd. from MeOH-MeCO-dioxane to
gave 4 g. 2-carboxymethylthio-4-n-pentylaminopyrimidine-HCl, m.
143-5° (decomposition). 2-Carboxymethylthio-4-n-pentylaminopyrimidine-
HCl (2.28 g.) and 20 ml. concentrated HCl was refluxed 4 hrs., cooled,
the pH
adjusted to 7 with NH4OH, and the precipitate recrystd. from H2O to give
0.7 g.
4-n-pentylamino-2-pyrimidinol, m. 105-7° (decomposition).
4-n-hexylamino-2-pyrimidinethiol (3.17 g.), 1.59 g. Na2CO3, and 12 g.
Raney Ni in 100 ml. EtOH was refluxed 24 hrs., filtered while hot, 12 g.
Raney Ni added, refluxed 8 hrs., filtered, the filtrate evaporated to
dryness
in vacuo, and the residue crystallized from hexane-C6H6 to give 0.8 g.
4-n-hexylaminopyrimidine, m. 61-3°. Prepared similarly were:
4-n-heptylaminopyrimidine-HCl, m. 147-52° (decomposition);
4-benzylaminopyrimidine, m. 105-7°, and 4- [2-
tetrahydrofurfurylamino]pyrimidine-HCl, m. 155-7°.
IT 97514-39-5P, 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl- 98681-46-0P, 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl-
RL: PREP (Preparation)
(preparation of)
RN 97514-39-5 CAPLUS
CN 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)

L4 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 98681-46-0 CAPLUS
CN 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl- (7CI) (CA INDEX NAME)

L4 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1962:475935 CAPLUS
DOCUMENT NUMBER: 57:75955
ORIGINAL REFERENCE NO.: 57:13105a-c
TITLE: Unexpected reaction of alkyl halides with silver derivative of a benzomethalazone
AUTHOR(S): Bordet, Roger
CORPORATE SOURCE: Univ. Dakar, W. Africa
SOURCE: Compt. Rend. (1962), 255, 533-5
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB In 2.4 g. 2-phenyl-3,5-benzothiazinone and 80 ml. boiling EtOH was dissolved 2 g. AgNO3 and the mixture cooled to precipitate 3.5 g. I, pale yellow,
decomposed at 80°. I, 2 g. MeI, and 50 ml. PhMe stirred 2 hrs. at 50°, the mixture filtered, the filtrate evaporated, and the residue crystallized from EtOH gave 1.5-2 g. 1-methyl derivative (II) of I, m. 81°.
Hydrolysis of II in boiling H2O gave PhCHO and 2-MeSC6H4CONHR (III).
Homologs of II made were 1-Et, m. 55°, and 1-Pr, m. 50°.
Corresponding homologs of III were 2-EtS, m. 131-2°, and 2-PrS, m. 123.5°, which was further hydrolyzed to 2-PrSC6H4CO2R, m. 121.2-2.5°.
IT 97283-55-1P, 1H-1,3-Benzothiazin-4(3H)-one, 1-methyl-2-phenyl- 97514-39-5P, 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl- 98681-46-0P, 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl-
RL: PREP (Preparation)
(preparation of)
RN 97283-55-1 CAPLUS
CN 1H-1,3-Benzothiazin-4(3H)-one, 1-methyl-2-phenyl- (7CI) (CA INDEX NAME)

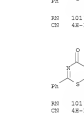
L4 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 97514-39-5 CAPLUS
CN 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)

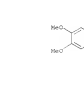
RN 98681-46-0 CAPLUS
CN 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl- (7CI) (CA INDEX NAME)

L4 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1961:27817 CAPLUS
DOCUMENT NUMBER: 55:27817
ORIGINAL REFERENCE NO.: 55:5509b-i,5510a-d
TITLE: Arylbenzo[e]-1,3-thiazine derivatives. III. Verification of the position of the alkoxy groups in arylbenzo[e]-1,3-thiazine derivatives by synthesis
AUTHOR(S): Szabo, J.; Vinkler, E.
CORPORATE SOURCE: Med. Chem., Szeged, Hung.
SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1958), 17, 321-9
CODEN: ACASA2; ISSN: 0001-5407
DOCUMENT TYPE: Journal
LANGUAGE: German
AB cf. CA 52, 6758e. The position of alkoxy groups in several dialkoxybenzo[e]-1,3-thiazine derivs was verified by oxidation of the benzothiazine bases to 4-ano derivs., and comparison of these with the same products obtained from S-aroylthioalkylamides, the alkoxy positions of which were known. The S-aroylthioalkylamide derivs., which were prepared from 6,7-dialkoxy deriv., obtained from 6,7,4-(HO)2(MeO)2C6H2CO2H, were cyclized to 4-ano derivs. according to Bohme and Schmidt (cf. CA 49, 15967a). Thus, 2.85 g. 2-phenyl-6,7-dimethoxybenzo[e]-1,3-thiazine in 10 ml. HOAc treated with 1.35 g. CrO3 in 1 ml. H2O and 2 ml. HOAc gave after 10 min. 2-B-(2-phenyl-4-ano-6,7-dimethoxybenzo[e]-1,3-thiazine (I), yellow needles, m. 189-92° (alc.). Similarly prepared were: from 0.84 g. 2-(3,4-dimethoxyphenyl)-6,7-dimethoxybenzo[e]-1,3-thiazine 0.25 g. 2-(3,4-dimethoxyphenyl)-4-ano-6,7-dimethoxybenzo[e]-1,3-thiazine (II), yellow needles, m. 217-18° (alc.); from 1.77 g. 2-phenyl-6,7-diethoxybenzo[e]-1,3-thiazine, 0.52 g. 2-phenyl-4-ano-6,7-diethoxybenzo[e]-1,3-thiazine (III), yellow needles, m. 154-5° (alc.). 6,3,4-EtN(MeO)2C6H2CO2H (9.6 g.) in 100 ml. H2O and 10 ml. concentrated HCl added at 0° to 3.45 g. NaNO2 in 15 ml. H2O, the mixture stirred 1 hr. at 0°, added with stirring to a solution prepared from 17 g. NaOH, 15 ml. H2O, and 1.77 g. S, treated with 2.13 g. NaOH in 100 ml. H2O and with 70 g. crushed ice, the mixture stirred 3 hrs. until N evolution ceased, acidified with HCl, the precipitate filtered off, washed with H2O, dissolved in dil.aq.NaHCO3, treated with C, precipitated with concentrated HCl, filtered, washed with H2O, suspended in 50 ml. MeOAc, 2 g. Zn added, the mixture refluxed 3 hrs., cooled, centrifuged, the precipitate heated 15 min. with 10 g. NaOH in 50 ml. H2O, filtered, the solution acidified with HCl, and the precipitate filtered off, washed with H2O, and dried gave 4.6 g. 4,5-dimethoxythioalicylic acid (IV), needles, m. 184-5° (alc.). IV (4.9 g.) in 25 ml. alc. treated with a saturated aq. iodine solution until yet colored brown, KIO added, the precipitate formed filtered off, washed with 50% alc., and dried at 105° gave 3.95 g. 4,4',5,5'-tetramethoxydiphenyl

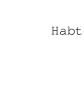
L4 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
the prepn. of IX gave 2.14 g. 5-benzoyl-4,5-diethoxythioalicylanide (XX), needles, m. 179-80° (alc.). XX (1.73 g.) treated as in the prepn. of I gave 0.9 g. XII, m. 154-5° (alc.).
IT 56755-15-8P, 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- 101734-42-3P, 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- 101734-79-4P, 4H-1,3-Benzothiazin-4-one, 2-(3,4-dimethoxyphenyl)-6,7-dimethoxy-
RL: PREP (Preparation)
(preparation of)
RN 56755-15-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)



RN 101734-42-3 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)



RN 101734-79-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (CA INDEX NAME)



L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
disulfide-2,2'-dicarboxylic acid (V), needles, m. 240-50° (alc.). V (8.52 g.) dissolved on the H2O bath in a soln. of 4 g. KHCO3 in 30 ml. H2O, evapd. to dryness at 105°, the residue pulverized, suspended in 50 ml. CHCl3, gradually treated with 10 g. SOCl2, refluxed 30 min., the solvent and SOCl2 distd. in vacuo, the mixt. cooled, and the crystals formed washed with 15-20 ml. petr. ether gave 7.2 g. 4,4',5,5'-tetramethoxydiphenyl disulfide-2,2'-dicarboxyl chloride (VI), yellow needles, m. 146-8° (CHCl3). VI (6.35 g.) treated in 40 ml. CHCl3 satd. with dry NH3, gave 5.2 g. 4,4',5,5'-tetramethoxydiphenyl disulfide-2,2'-dicarboxamide (VII), needles, m. 225-6° (alc.). VII (4.24 g.) in 20 g. MeOAc treated with 1 g. Zn powder, and the mixt. refluxed 1 hr. gave 2.55 g. 4,5-dimethoxythioalicylamide (VIII), yellow needles, m. 169-70° (alc.). VIII (2.13 g.) in 8 ml. abs. CHCl3 gradually treated with 1.4 g. BrCl, stirred 30 min., poured into dil. H2SO4 and crushed ice, the product filtered off, washed with H2O, and dried gave 2.7 g. 5-bromoglycyl-4,5-dimethoxythioalicylamide, needles, m. 179-80° (alc.). Two-thirds of a soln. of 1.59 g. IX in 30 ml. abs. alc. was boiled 2 hrs. with a few introduced pieces of Na, the remainder of the solvent distd. in vacuo after shutting off the HCl, the residue dissolved in CHBr3, washed with N NaOH and H2O, dried, the solvent distd., and the residue crystd. from abs. alc. gave 0.5 g. I, m. 189-90°. VIII (1.07 g.) treated with 3,4-(MeO)2C6H3COCl as in the prepn. of IX gave 1.3 g. 5-veratroyl-4,5-dimethoxythioalicylamide (XX), needles, m. 173-4° (alc.). X (0.95 g.) treated as in the prepn. of I gave 0.4 g. II, m. 217-18° (alc.). o-ClC6H4COCl (41.5 g.) and 45 g. PhNMe2 gave dil. H2SO4 and crushed ice, the product filtered off, washed with H2O, and dried gave 2.7 g. 5-benzoyl-4,5-dimethoxythioalicylamide, needles, m. 179-80° (alc.). XI (1.73 g.) treated as in the prepn. of I gave 0.9 g. III, m. 154-5° (alc.).
IT 56755-15-8P, 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- 101734-42-3P, 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- 101734-79-4P, 4H-1,3-Benzothiazin-4-one, 2-(3,4-dimethoxyphenyl)-6,7-dimethoxy-
RL: PREP (Preparation)
(preparation of)
RN 56755-15-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

RN 101734-42-3 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)

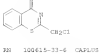
RN 101734-79-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (CA INDEX NAME)

L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:118336 CAPLUS
DOCUMENT NUMBER: 54:118326
ORIGINAL REFERENCE NO.: 54:22658h-i,22657a-b
TITLE: Studies on thiazine: oxobenzo-m-thiazine and some of its 2-(alkylamino) derivatives
AUTHOR(S): Conti, L.; Spinelli, D.
CORPORATE SOURCE: Univ. Bari, Italy
SOURCE: Bollettino Scientifico della Facolta di Chimica Industriale a Bologna (1959), 18, 29-73
CODEN: BSFCAY; ISSN: 0366-3205
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. Conti and Leandri, CA 51, 5765c; 51, 17926a; 51, 17927g. New thiazine derive. of potential pharmacol. interest were prepared in view of earlier and related work. 4-Oxobenzo-m-thiazine-2-carboxylic acid (I), m. 107° (EtOH), was prepared by adding 7.3 g. freshly distilled ClCO2CCl3 to 4.5 g. thiosalicylic acid in 20 ml. anhydrous dioxane, cooling the mixture on ice and salt, passing in a stream of dry HCl 3 hrs., allowing the mixture to stand overnight at 0°, filtering, neutralizing the aqueous suspension of the precipitate with NaHCO3 over Congo red, and adding m-thiazine-2-acetic precipitate (6 g. crude). 4-Oxobenzo-m-thiazine (II), C8H5NOS, sweetish taste, m. 138° (H2O), was prepared by boiling 1 g. I in 100 ml. H2O to solution and taking to near dryness. Et ester of 4-oxobenzo-m-thiazine-2-acetic acid, needles, m. 172° (EtOH and dioxane), was prepared analogously from 3 g. thiosalicylic acid and 2.6 g. BrCO2CCH2OEt in 20 ml. dioxane in 2.5-g. yield. 2-Chloromethyl-4-oxobenzo-m-thiazine, (III), m. 115° (benzene and a little absolute alc.), was similarly prepared in 2.1-g. yield from 3.3 g. thiosalicylic acid and 3.62 g. ClCH2CO2CH2Cl in 25 ml. anhydrous dioxane; it was not stable in air. 2-Morpholinomethyl derivative of II, m. 157° (C6H6), 2-piperidinomethyl derivative of II, needles, m. 149° (C6H6), 2-diethylaminomethyl derivative of II, platelets, m. 166° (alc.-C6H6), and 2-cyclohexylaminomethyl derivative of II, needles, m. 105° (C6H6 and petr. ether), were prepared by refluxing 1 mole III and 2.5 moles of the resp. amine in C6H6 and working up the products.
IT 67433-03-8P, 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester 98591-85-6P, 4H-1,3-Benzothiazine-2-carboxylic acid, 4-oxo- 98592-32-6P, 4H-1,3-Benzothiazin-4-one, 2-(chloromethyl)- 100615-33-6P, 4H-1,3-Benzothiazin-4-one, 2-(diethylaminomethyl)- 100795-57-7P, 4H-1,3-Benzothiazin-4-one, 2-morpholinomethyl- 100957-66-6P, 4H-1,3-Benzothiazin-4-one, 2-(cyclohexylaminomethyl)- 101838-35-6P, 4H-1,3-Benzothiazin-4-one, 2-piperidinomethyl-
RL: PREP (Preparation)
(preparation of)
RN 67433-03-8 CAPLUS
CN 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester (CA INDEX NAME)

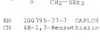
L4 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 98591-85-6 CAPLUS
CN 4H-1,3-Benzothiazine-2-carboxylic acid, 4-oxo- (CA INDEX NAME)

RN 98592-32-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(chloromethyl)- (CA INDEX NAME)



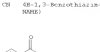
RN 100415-33-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(diethylaminomethyl)- (6CI) (CA INDEX NAME)



RN 100795-37-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-morpholinomethyl- (6CI) (CA INDEX NAME)

L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 100957-60-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(cyclohexylaminomethyl)- (6CI) (CA INDEX NAME)



RN 101938-35-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-piperidinomethyl- (6CI) (CA INDEX NAME)

L4 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:97610 CAPLUS
DOCUMENT NUMBER: 54:97610
ORIGINAL REFERENCE NO.: 54:18530f-i,18531a-b
TITLE: Sulfuration of organic compounds. XIX. Synthesis of 3,1-benzothiazine-4-thiones and corresponding oxygenated compounds
AUTHOR(S): Legrand, Louis
CORPORATE SOURCE: Fac. sci., Caen
SOURCE: Bulletin de la Societe Chimique de France (1960) 337-43
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. CA 54, 13303b. o-ROCONHC6H4CO2R' (I) (from RCOCl and o-H2NC6H4CO2R', except when R' = H) (20 g.), refluxed 1 hr. with 40 g. P2S5 in 500 cc. xylene, the solution cooled, brought to 1 l., with CS2H6, filtered, the filtrate washed with dil. 5% KOH and with H2O, MgCl2 in Me2CO added, the addition compound filtered, washed with Et2O, and decomposed with aqueous Na2S, or, if the addition compound is soluble, the solvent evaporated, gives 2-R-3,1-benzothiazine-4-thione (II); red or orange crystals. To 1 g. II in 150 cc. boiling Me2CO is added powdered KMnO4 to give a quant. yield of 2-R-3,1-benzothiazin-4-one (III) [when X = aryl, 1 g. II in 50 cc. boiling AcOH is oxidized to 90-5% III by 2 g. Hg(OAc)2]. R, R', m.p. of I, yield of II, m.p. of II, and m.p. of III are: H, H, 168°, 5, 114°, 122°; Me, H, 185°, 6 (Me, Me 84), 99°, 93°; Et, Me, 84° (bl 165°), 35, 63°, -; iso-Pr, Me, 49-54° (bl 236°), 19, 91°, -; tert-Bu, Me, 46-7° (bl 128-30°), 80, 80°, -; PhCH2, Me, 45° (bl 200-3°), 30, 148°, 90°; Ph, H, 191°, 5 (Ph, Me 158; Ph, Et 139), 128°, 156°; 2-MeC6H4, Me, 98°, 32, 118°, Et, 103°, 4-MeC6H4, Me, 114°, 35, 142°, 130°; 4-MeOC6H4, Et, 114.5°, 17, 144°, 77°; 2-ClC6H4, Et, 159°, 45, 165° 158°, 4-ClC6H4, Me, 134°, 39, 215°, 208°; 2-BrC6H4, Me, 86°, 29, 170°, 131°; 3-BrC6H4, Me, 83°, 39, 187°, 123°; 4-BrC6H4, Et, 123°, 34, 216°, 197°, 2-O2NC6H4, Me, 158°, 50, 147°, 169°, 3-O2NC6H4, Et, 217°, 29, 184°, 166.5°; 1-C10H7, Me, 150°, 50, 175.5°, 156°, 2-C10H7, 129°, 50, 157.5°, 155°. Similarly, 2,8-(MeO)2C10H5CO2Me (IV) gives 2-R-6-chloro-3,1-benzothiazine-4-thone (V) and 2-R-6-chloro-3,1-benzothiazine-4-one (VI): R, m.p. of IV, yield of V, m.p. of V, and m.p. of VI are: H, -, 0, 141.5°, -; Me, 130°, 12, 143°, 121°; Ph, 140°, 30, 141°, 176°, 2-ClC6H4, 201°, 40, 241°, 236°. To II in boiling alc. is added a 10% solution of KOH until the color changes to yellow. The solution is concentrated and AcOH added to give crystals of unstable o-ROCNHC6H4CO2H, which, heated at 120-60°, gives approx. 80% (from III 2-R-3,1-benzoxazin-4-one (VII). R and m.p. of VII are: H, 123°; 2-MeC6H4, 116°; 6-MeC6H4, 156°, 2-ClC6H4, 156°; 4-ClC6H4, 199°; 2-BrC6H4, 120.5°; 3-BrC6H4, 158°; 2-ClC10H7, 206.5°. Similarly, V gives the following 2-R-6-chloro-3,1-benzoxazin-4-ones (R and m.p. shown): Ph, 196°,

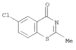
L4 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
4-ClC6H4, 194°. II (R = Ph) (VIII) with H2O2 and K in alc.-H2O gives o-PhCONHC6H4CO2H. VIII is formed from III (R = Ph) or VII (R = Ph) heated with P2S5 in xylene.
IT 98592-33-7
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 98592-33-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6-chloro-2-methyl- (CA INDEX NAME)

L4 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:97609 CAPLUS
DOCUMENT NUMBER: 54:97609
ORIGINAL REFERENCE NO.: 54:18529g-i,18530a-f
TITLE: Chlorination and bromination of cyclic acetals
AUTHOR(S): Cort, L. A.; Pearson, Ronald G.
CORPORATE SOURCE: Battersea Coll. Technol., London
SOURCE: Journal of the Chemical Society (1960) 1682-7
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 54:97609

AB Cl was fed into 55 g. molten trans-1,4,5,8-tetraoxadecahydronaphthalene (I), prepared according to Contardi and Ercoli (CA 31, 17644 in the presence of a crystal of iodine at 140° until 1 mole was absorbed. Distillation gave 4.2 g. fraction, b0.6 134-52°, from which was obtained 2,3-dioxo-1,4-dioxane, m. 144-5.5°, infrared absorption (broad band) 1770 cm.-1. During chlorination, 60 g. volatile material was passed through a H2O-condenser and trap at 0° to give 1.4 g. liquid condensate; no solid derivative could be obtained with KOH and α-naphthol in EtOH from the liquid fraction (0.35 g.), b764 80-98°. I (67 g.) chlorinated as above, continued until 0.5 mole was absorbed, and the mixture held 5 hrs. at 80-95°/17 mm. gave 22.6 g. sublimate, m. 133-8° (CCl4) and a liquid residue, which, on distillation, gave 11.3 g. distillate, b0.2 98-150° and 14.5 g. residue which did not distil at 245°/0.2 mm. Di-2-bromoethyl oxalate (Ia), m. 55.0-5.5° (C6H6-ligroine) was obtained from H2C2O4 (64% yield) by the method of Contardi, et al. I (19.5 g.) and 25.2 g. N-bromosuccinimide (II) was heated in a sealed tube 22 hrs. at 120°, the product extracted with CCl4, the CCl4 distilled, and the residue (4.2 g.) held 4 hrs. at 85°/14 mm. ((0.22 g.) unchanged I sublimed) to give 0.5 g. unsublimed Ia, m. 55.0-5.5 (C6H6-ligroine), infrared absorption 4000-650 cm.-1, strong at 1774 and 1745. 1,3-Dioxolane (III) (266 g.) containing 0.5 g. iodine was chlorinated at the b.p. (exothermic reaction) to constant weight (3 days), the product distilled at atmospheric pressure, and the main fraction distilled 3 more times to give 185 g. 2-chloroethyl formate (IIIa), b763 131-2°, n25D 1.4251. Br (294 g.) was added dropwise to 136 g. III at 0° to give 425.5 g. product which, on repeated distillation in vacuo, gave 37 g. 2-bromoethyl formate (IV), b765 147-9°, b13 44.0-0.5, n25D 1.4611; approx. the same yield of IV was obtained with all distns. except the 1st at atmospheric pressure. Evidence is given of thermal rearrangement of α-chloroacetals comparable with that for α-bromoacetals. Bromination of 23.5 g. III in 25 ml. CCl4 with 50 g. II and distillation in vacuo gave 13.4 g. IV, b13 44.0-4.5, n25D 1.4611; a fraction, b13 124-5°, after hydrolysis with H2O at 80° and treatment with Brady's reagent, gave, as derivs. (separated with EtOH), the following 2,4-dinitrophenylhydrazones: glyoxal bis-, m. 333-6°

L4 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(decompn.), and HCHO, m. 164-6° in approx. equal quantities. Di-2-chloroethyl oxalate (from 2.2 g. H2C2O4) and 2.5 g. p-anisidine (V), heated at 100° and resolidified after 15 min., gave the di-p-anisidide of H2C2O4, m. 263.5-4.5° (C2H2Cl4 and dioxane-H2O). IIIa (10 g. from III) boiled in 30 ml. C6H6 with 11.3 g. V 1 hr. and the C6H6 removed gave 5.2 g. p-anisidide of HCO2H, m. 78° (EtOH). 2-Bromoethyl formate (30 g. from III) and 24.1 g. V, heated 1.5 hrs. on a steam bath, the cold mixt. triturated with 10 ml. MeOH and after 3 days, the crystals (11.2 g.) collected, gave needles, m. 287-9° (decompn.) (MeOH-dioxane); this (3.5 g.) treated with dil. aq. NaOH and Ac2O gave aceto-p-anisidide, m. 127° (H2O). S-2-Hydroxyethylthiuronium picrate (VI), m. 234-42° (decompn.), prepd. in the usual way from BrCH2CH2OH in EtOH with previous melting at 162-4° and resolidification at 168°, was recovered quant. after boiling 8 hrs. in Me2CO. IIIa (3.6 g. from III), 5.0 g. NaI, and 3.5 g. (H2N)2C:S was boiled 8 hrs. in 15 ml. Me2CO, 10 g. picric acid added to the cold mixt., then 15 ml. H2O, the mixt. boiled to give a clear soln., evapd. to half vol., and an equal vol. H2O added to give, on cooling, 3.2 g. VI, m. 236-46° (decompn.) (H2O). Repetition of the expt. with 14.5 g. IIIa in Me2CO as solvent at all stages gave 21.1 g. VI, m. 240-4° (decompn.) (Me2CO-C6H6). Treatment of 3.6 g. IV with (H2N)2 C:S in EtOH gave 3.5 g. VI, m. 242-52° (decompn.) with previous melting and solidification at 163-6°.

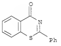
IT 98592-33-7
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 98592-33-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6-chloro-2-methyl- (CA INDEX NAME)



L4 ANSWER 42 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:56490 CAPLUS
DOCUMENT NUMBER: 54:56490
ORIGINAL REFERENCE NO.: 54:11033f-h
TITLE: A new heterocyclic system of the benzo[4,5]m-thiazine type. II
AUTHOR(S): Boudet, Roger
CORPORATE SOURCE: Fac. Scis., Dakar
SOURCE: Bulletin de la Societe Chimique de France (1959) 1791-3
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 49, 5376e. By condensation of PhCCl3 with 2-mercaptobenzamide (I) in the presence of Zn in p-xylene, 2-phenylbenzo[4,5]-m-thiazin-6-one (II) was obtained. II was chemical inert against the usual reagents, except H2SO4. This great stability is apparently due to considerable resonance stabilization. A suspension of 20 g. Zn derivative of II in 16.5 ml. PhCCl3 and 200 ml. anhydrous p-xylene was slowly heated under vigorous stirring for 6-8 hrs. until the HCl evolution ceased. After chilling the solvent was distd and the residue dissolved in 100 ml. boiling PrOH. On cooling, 12 g. crude II was isolated and recrystd. from CHCl3 or PrOH to yield 45% II, m. 108.3-9.0°. II (1 g.) in 20 ml. pure H2SO4 was heated slowly to 40°, until the evolution of SO2 ceased, and, after 24 hrs. at room temperature, ice was added to yield 0.6 g. (o-H2NCOC6H4S)2, m. 249°, and 0.5 g. BzOH.

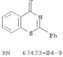
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
RL: PREP (Preparation)
(preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)



L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:99143 CAPLUS
DOCUMENT NUMBER: 51:99143
ORIGINAL REFERENCE NO.: 51:17927g-h
TITLE: 2-Aryl-4-oxo-5,6-benzo-1,3-thiazines
AUTHOR(S): Conti, L.; Leandri, G.
CORPORATE SOURCE: Uhiv. Bologna, Italy
SOURCE: Bollettino Scientifico della Facolta di Chimica Industriale di Bologna (1957), 15, 37-9
CODEN: BSFCAY; ISSN: 0366-3205
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB A new synthesis is described for the preparation of 2-aryl-4-oxo-5,6-benzo-1,3-thiazines, obtained by condensation of thiosalicylic acid with aromatic nitriles in presence of aqueous HCl. Numerous derivs. are described with regard to their possible therapeutic activity. Compds. prepared are (aryl given): Ph, needles, m. 125° (from EtOH); p-O2NC6H4, yellow prisms, m. 230° (from EtOH-dioxane) [oxime, yellow prisms, m. 255° (from EtOH-dioxane)]; m-O2NC6H4, yellow prisms, m. 212° (from EtOH-dioxane); m-MeC6H4, m. 136° (from EtOH); p-MeC6H4, m. 168° (from EtOH); m-ClC6H4, m. 178° (from EtOH); p-ClC6H4, prisms, m. 166° (from EtOH); p-O2MeSC6H4, m. 234° (from dioxane); PhCH2, yellow needles, m. 155° (from dioxane); 2-pyridyl, m. 177° (from EtOH); 3-pyridyl, m. 158° (from EtOH); 4-pyridyl, m. 172° (from EtOH).

IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl- 67433-04-9P, 4H-1,3-Benzothiazin-4-one, 2-benzyl- 100961-67-9P, 4H-1,3-Benzothiazin-4-one, 2-[p-(methylsulfonyl)phenyl]- 106274-04-8P, 4H-1,3-Benzothiazin-4-one, 2-(p-nitrophenyl)- 106274-94-6P, 4H-1,3-Benzothiazin-4-one, 2-(m-nitrophenyl)- 106782-45-0P, 4H-1,3-Benzothiazin-4-one, 2-[p-chlorophenyl]- 106782-86-9P, 4H-1,3-Benzothiazin-4-one, 2-[m-chlorophenyl]- 107915-37-7P, 4H-1,3-Benzothiazin-4-one, 2-p-tolyl- 107917-93-1P, 4H-1,3-Benzothiazin-4-one, 2-m-tolyl-
RL: PREP (Preparation)
(preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)



RN 67433-04-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)

L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 10396l-67-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[p-(methylsulfuryl)phenyl]- (6Cl) (CA INDEX NAME)

RN 106274-04-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(4-nitrophenyl)- (CA INDEX NAME)

RN 106274-94-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(m-nitrophenyl)- (6Cl) (CA INDEX NAME)

RN 106782-45-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-chlorophenyl)- (6Cl) (CA INDEX NAME)

L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 106782-86-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(m-chlorophenyl)- (6Cl) (CA INDEX NAME)

RN 107915-37-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-tolyl)- (6Cl) (CA INDEX NAME)

RN 107917-93-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(m-tolyl)- (6Cl) (CA INDEX NAME)

L4 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:99142 CAPLUS
DOCUMENT NUMBER: 51:99142
ORIGINAL REFERENCE NO.: 51:17927e-g
TITLE: Preparation and structure of some chloro derivatives of the phenothiazine series. II. On the structure of dichlorophenothiazine and some derivatives
AUTHOR(S): Antonov, D. Sinov
SOURCE: Doklady Bolgarskoi Akademii Nauk (1954), 9(No. 4), 57-60
CODEN: DBANAD; ISSN: 0366-8681
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 49, 5442c. 2,7-Diaminophenothiazine dioxide (I) (2.2 g.) dissolved in 60 ml. H2O containing 3 ml. HCl, 60 ml. concentrated HCl [37°], added, and 7 ml. 10% solution NaNO2 dropwise added, the solution heated to 50°, cuprous chloride catalyst (from 2.5 g. copper sulfate) added in one batch gave 1.06 g. 2,7-dichlorophenothiazine dioxide (II), m. 301-2°. II is identical with dichlorophenothiazine dioxide obtained from dichlorophenothiazine oxide. The position of the two chlorine atoms is thereby established.
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
RL: PREP (Preparation)
(preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

L4 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1955:54282 CAPLUS
DOCUMENT NUMBER: 49:54282
ORIGINAL REFERENCE NO.: 49:10907a-e
TITLE: Oxo compounds of the benzothiazine series
AUTHOR(S): Bohme, Horst; Schmidt, Wilhelm
CORPORATE SOURCE: Univ. Marburg/Lahn, Germany
SOURCE: Arch. Pharm. (1955), 288, 437-41
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 49:54282
AB cf. C.A. 49, 8289a. S-Acetylthiosalicylamide (I) was prepared in low yield by treating Na thiosalicylamide with AcCl in C6H6 (cf. Reissert and Manns, C.A. 22, 4114) and in good yield from thiosalicylamide (II) and AcCl in C5H5N; S-propionylthiosalicylamide (III) was prepared in analogous manner. Sols. of S-acylthiosalicylamides saturated with HCl, on addition of xylene or toluene, distillation, and working up the residue yield the corresponding benzothiazine deriv. 4-Oxo-2-phenyl-5,6-benzo-1,3-thiazine (IV), yellowish crystals, m. 122-3° (from absolute EtOH or MeCN), was prepared in 59% yield by passing HCl for several min. through 2.0 g. S-benzoylthiosalicylamide in 20 ml. xylene at 140°, raising the temperature slowly, and distilling slowly (60-75 min.) while passing a little HCl through the solution, removing traces of solvent from the oily residue in vacuo, dissolving it in 20 ml. C6H6, removing unreacted amide with N NaOH, washing with H2O, drying over CaCl2, and removing C6H6. IV.HCl is not stable. I, colorless prisms, m. 148° (from EtOAc), was prepared in 88° yield by adding 5.1 g. AcCl drop by drop to 10.9 g. II in 25 ml. anhydrous C5H5N while stirring, letting stand 30 min. at -15°, adding 80 ml. Et2O, triturating with 50 ml. dilute H2SO4 at 0°, filtering, washing with H2O, and drying. N,N-Diacetylthiosalicylamide, colorless needles, m. 74-5°, was prepared by refluxing I with excess Ac2O 5-6 hrs. 4-Oxo-2-methyl-5,6-benzo-1,3-thiazine-HCl, m. about 140° (decomposition), was prepared in 74% yield from I like IV; free base m. about 190° (decomposition, sintering 180°) (from C6H6). III, colorless needles, m. 107-8°, was prepared like I in 90% yield. 4-Oxo-2-ethyl-5,6-benzo-1,3-thiazine-HCl, m.p. not given, was prepared in 61% yield like IV; free base, yellow powder, m. 56-60°.
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
854066-98-1P, 4H-1,3-Benzothiazin-4-one, 2-methyl-, hydrochloride
854067-00-8P, 4H-1,3-Benzothiazin-4-one, 2-methyl-
854067-02-0P, 4H-1,3-Benzothiazin-4-one, 2-ethyl-, hydrochloride
854067-04-2P, 4H-1,3-Benzothiazin-4-one, 2-ethyl-
RL: PREP (Preparation)
(preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

L4 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 854066-98-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-methyl-, hydrochloride (5CI) (CA INDEX NAMES)

● HCl

RN 85406 7-00-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-methyl- (CA INDEX NAMES)

RN 85406 7-02-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-ethyl-, hydrochloride (5CI) (CA INDEX NAMES)

● HCl

L4 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 85406 7-04-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-ethyl- (CA INDEX NAME)